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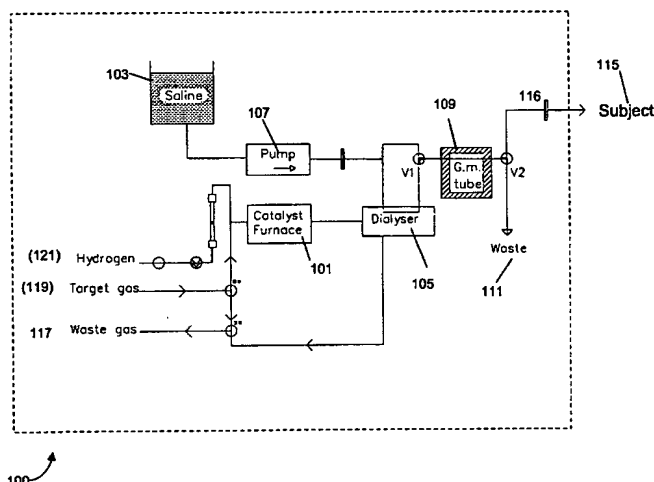
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[Continued on next page]

(54) Title: **RADIOPHARMACEUTICAL GENERATION SYSTEM**



(57) Abstract: The present invention relates to radiopharmaceutical generation system for use in generating a radiopharmaceutical, and is particularly concerned with improving the amount of information, relating to the process of generating the pharmaceutical, that is available. In a first aspect of the invention, the radiopharmaceutical generation system comprises a fluid processing system arranged to perform one or more processes in relation to a radiopharmaceutical, the fluid processing system having a plurality of system elements and being arranged to output signals indicative of a state of the fluid processing system, each of said system elements having an expected operative state; and at least one monitoring software component arranged to derive data from said output signals and to compare said derived data with one or more operating conditions in order to identify system elements not in the expected operative state. Since the expected operating state of the system elements is monitored during execution of the processes, real-time monitoring is possible. This means that fault finding and trouble shooting is easier than it is with current systems.

WO 2004/080523 A3



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## A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 4 625 118 A (GAERTNER KARL ET AL) 25 November 1986 (1986-11-25) cited in the application column 1, line 55 - column 4, line 30	1-12, 18-20
X	US 6 461 433 B1 (RUSSELL JR JOHN L ET AL) 8 October 2002 (2002-10-08) column 1, line 15 - column 22, line 54	1-12, 18-32
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X	US 5 371 372 A (PHILLIPS DENNIS R) 6 December 1994 (1994-12-06) the whole document	1-16, 18-33
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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